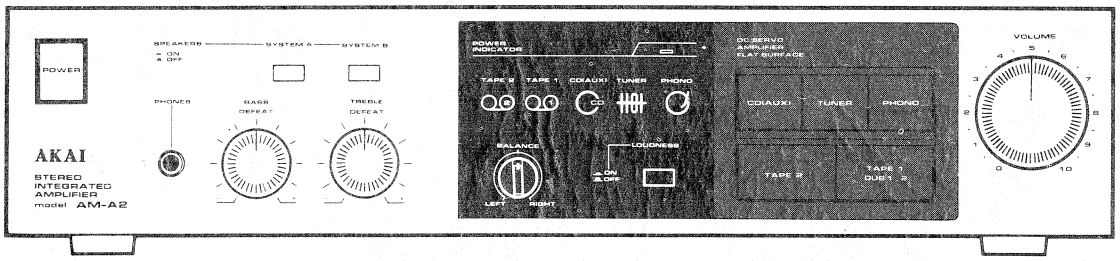
AKAI SERVICE MANUAL

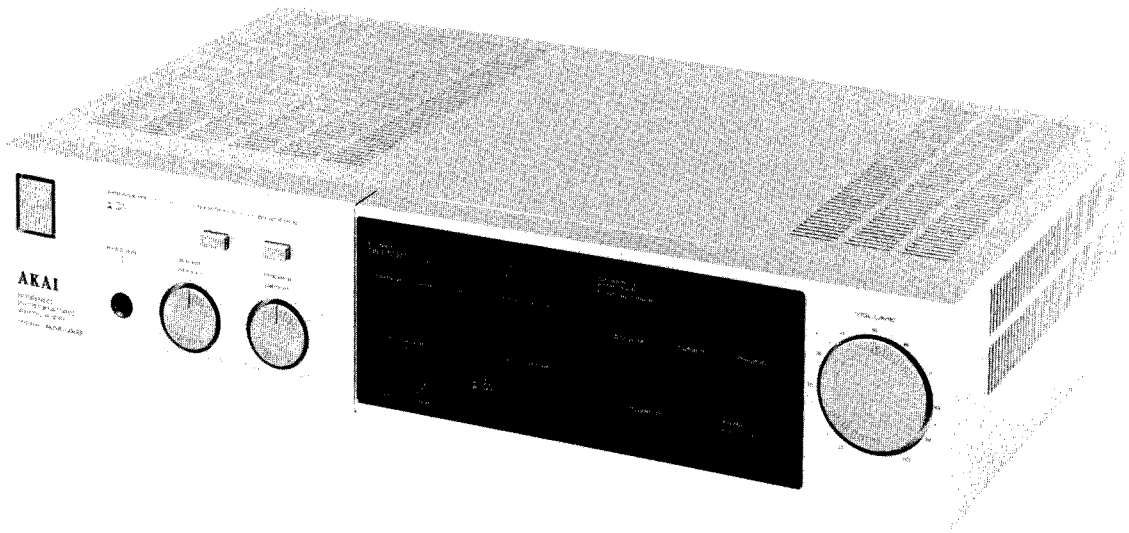


STEREO INTEGRATED AMPLIFIER

MODEL AM-A2

ABBREVIATIONS FOR SERVICE MANUAL
MODEL AM-A2

ABBREVIATION	EXPLANATION
AC	Alternating Current
AMP	AMPlifire
FTC	Federal Trade Commission
GND	GrouND
G·EQ	Graphic EQualizer
IHF	Institute High Fidelity (Standard)
NF	Negative Feedback
RIAA	Recording Industry Association of America
SP	SPeaker
SW	SWitch
VR	Variable Resistance



INTEGRATED AMPLIFIER
MODEL AM-A2

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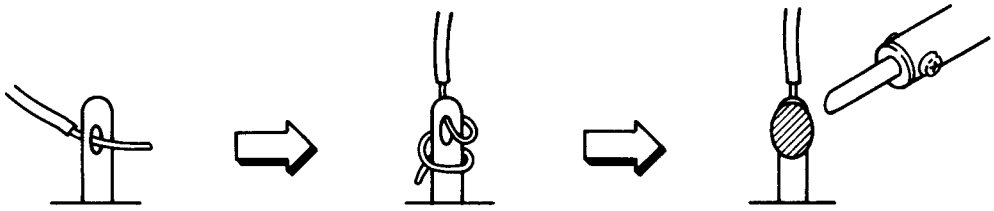
SECTION 2 PARTS LIST 9

SAFETY CHECK AFTER SERVICING

Confirm the specified insulation resistance between power cord plug prongs and externally exposed parts of the set is greater than 10 Mohms, but for equipment with external antenna terminals (tuner, receiver, etc.) and is intended for [C] or [A], specified insulation resistance should be more than 2.2 Mohms (ground terminals, microphone jacks, headphone jacks. line-in-out jacks etc.)

PRECAUTIONS DURING SERVICING

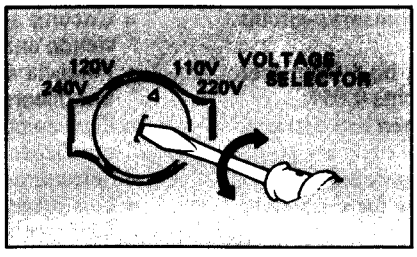
1. Parts identified by the ⚠ symbol parts are critical for safety.
   Replace only with parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation. These must also be replaced only with specified replacements.
   Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
   1) Insulation Tape
   2) PVC tubing
   3) Spacers (Insulating Barriers)
   4) Insulation sheets for transistors
   5) Plastic screws for fixing microswitch (especially in turntable)
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap ends of wires securely about the terminals before soldering.



6. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

VOLTAGE CONVERSION

Models for Canada, USA, Europe, UK and Australia are not equipped with this facility. Each machine is preset at the factory according to destination, but some machines can be set to 110V, 120V, 220V, or 240V as required.
If your machine's voltage can be converted:
Before connecting the power cord, turn the VOLTAGE SELECTOR located on the rear panel with a screwdriver until the correct voltage is indicated.



SECTION 1

SERVICE MANUAL

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II. DISMANTLING OF UNIT 5
III. CONTROLS 6
IV. PRINCIPAL PARTS LOCATION 7
V. ADJUSTMENT 7
VI. PC BOARD TITLE AND IDENTIFICATIONS 8

For basic adjustments, measuring methods, and operating principles, refer to GENERAL TECHNICAL MANUAL.

I . SPECIFICATIONS

POWER AMPLIFIER SECTION

RATED POWER OUTPUT	8 ohms	4 ohms
20Hz to 20kHz	35W/0.05%	35W/0.05%
POWER OUTPUT (BY PTC)	8 ohms	4 ohms
20Hz to 20kHz	38W/0.05%	40W/0.08%
1kHz	42W/0.05%	43W/0.08%
MUSIC POWER (BOTH CHANNEL)	180W	
POWER BANDWIDTH (IHF –3dB, 8ohms)	5Hz to 50kHz (0.2%)	
S/N (IHF-A)		
PHONO	72dB	
CD (AUX)	95dB	
RESIDUAL NOISE (8ohms)	0.5mV	
CHANNEL SEPARATION (IHF, 1kHz)	55dB	
DAMPING FACTOR (1kHz, 8ohms)	40	
REQUIRED SPEAKER IMPEDANCE	A or B : 4 to 16 ohms	
	A + B : 8 to 16 ohms	

PRE AMPLIFIER SECTION

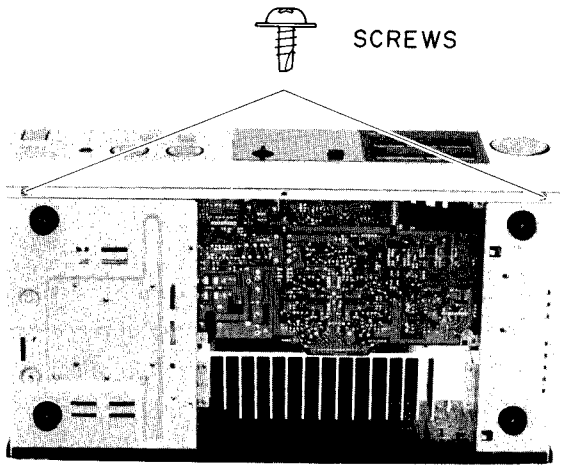
INPUT SENSITIVITY/IMPEDANCE	
PHONO	2mV/47kohms
CD (AUX)	150mV/47kohms
TAPE	150mV/47kohms
OUTPUT LEVEL/IMPEDANCE	
TAPE REC	150mV/1kohms
FREQUENCY RESPONSE	
PHONO (RIAA DEVIATION)	±0.5dB
CD (AUX)	5Hz to 80kHz (–3dB)
TONE CONTROL	
BASS	±8dB
TREBLE	±8dB
LOUDNESS CONTROL	
(VOLUME SET AT –30dB POSITION)	100Hz/+9dB
	10kHz/+5dB
PHONO MAX. INPUT LEVEL	150mV
POWER REQUIREMENTS	120V, 60Hz for USA & Canada
	220V, 50Hz for Europe except UK
	240V, 50Hz for UK & Australia
	110/120/220/240V, 50/60Hz switchable for other countries
DIMENSIONS	440 (W) x 98 (H) x 255 (D) mm
	(17.3 x 3.9 x 10 inches)
WEIGHT	5.45kg (11.99 lbs)

* For improvement purposes, specifications and design are subject to change without notice.

II. DISMANTLING OF UNIT

In case of trouble, etc. necessitating dismantling, please dismantle in the order shown in the photographs. Reassemble in reverse order.

3



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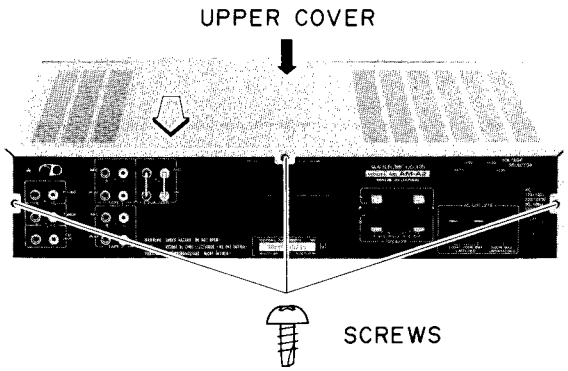

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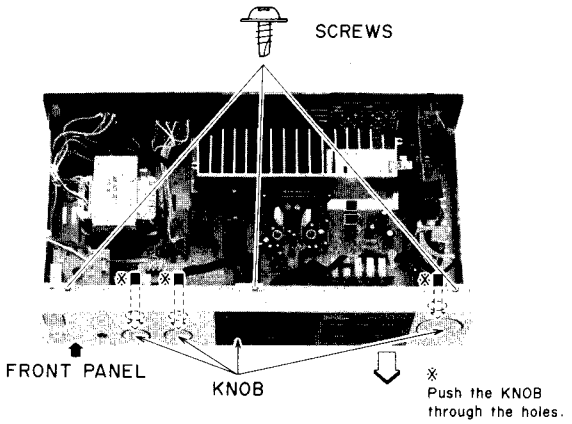

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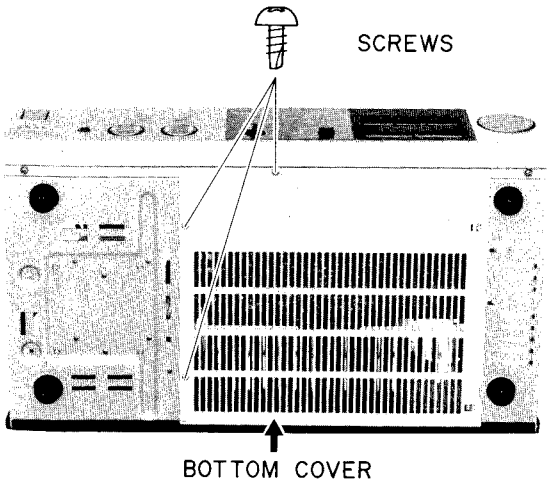

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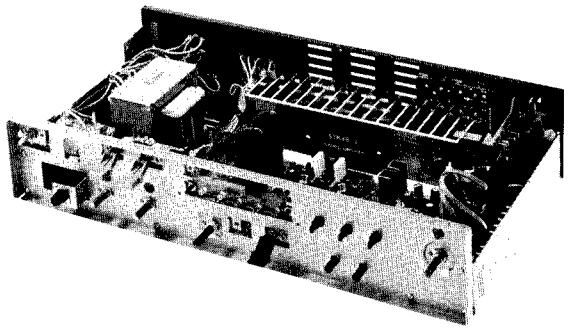

III. CONTROLS

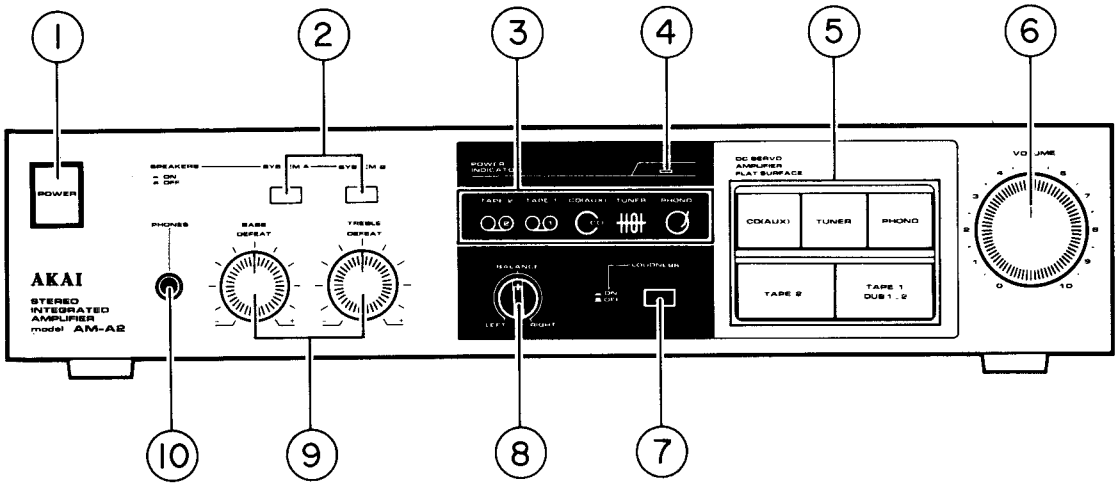

Fig. 3-1

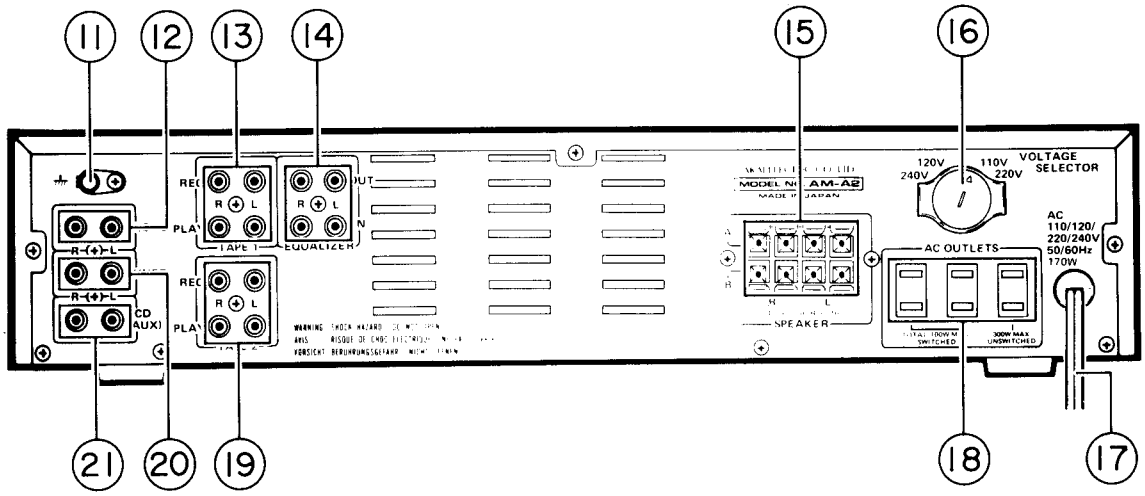

Fig. 3-2

1. POWER SWITCH
2. SPEAKER SELECTOR BUTTONS (SYSTEM A AND SYSTEM B)
3. INPUT SOURCE INDICATORS (PHONO, TUNER, CD (AUX), TAPE1 and TAPE2)
4. POWER INDICATOR
5. INPUT SOURCE SELECTOR BUTTONS (PHONO, TUNER, CD (AUX), TAPE1 and TAPE2)
6. VOLUME CONTROL
7. LOUDNESS BUTTON
8. BALANCE CONTROL
9. TONE (BASS, TREBLE) CONTROLS
10. HEAD PHONE JACK
11. GROUND TERMINAL
12. PHONO JACKS
13. TAPE1 (REC and PLAY) JACKS
14. EQUALIZER (IN and OUT) JACKS
15. SPEAKER TERMINALS
16. VOLTAGE SELECTOR SWITCH(Ⓤmodel only)
17. AC POWER CORD
18. AC OUTLETS (Ⓤ, Ⓒ, Ⓐ models only)
19. TAPE2 (REC and PLAY) JACKS
20. TUNER JACKS
21. CD (AUX) JACKS

IV. PRINCIPAL PARTS LOCATION

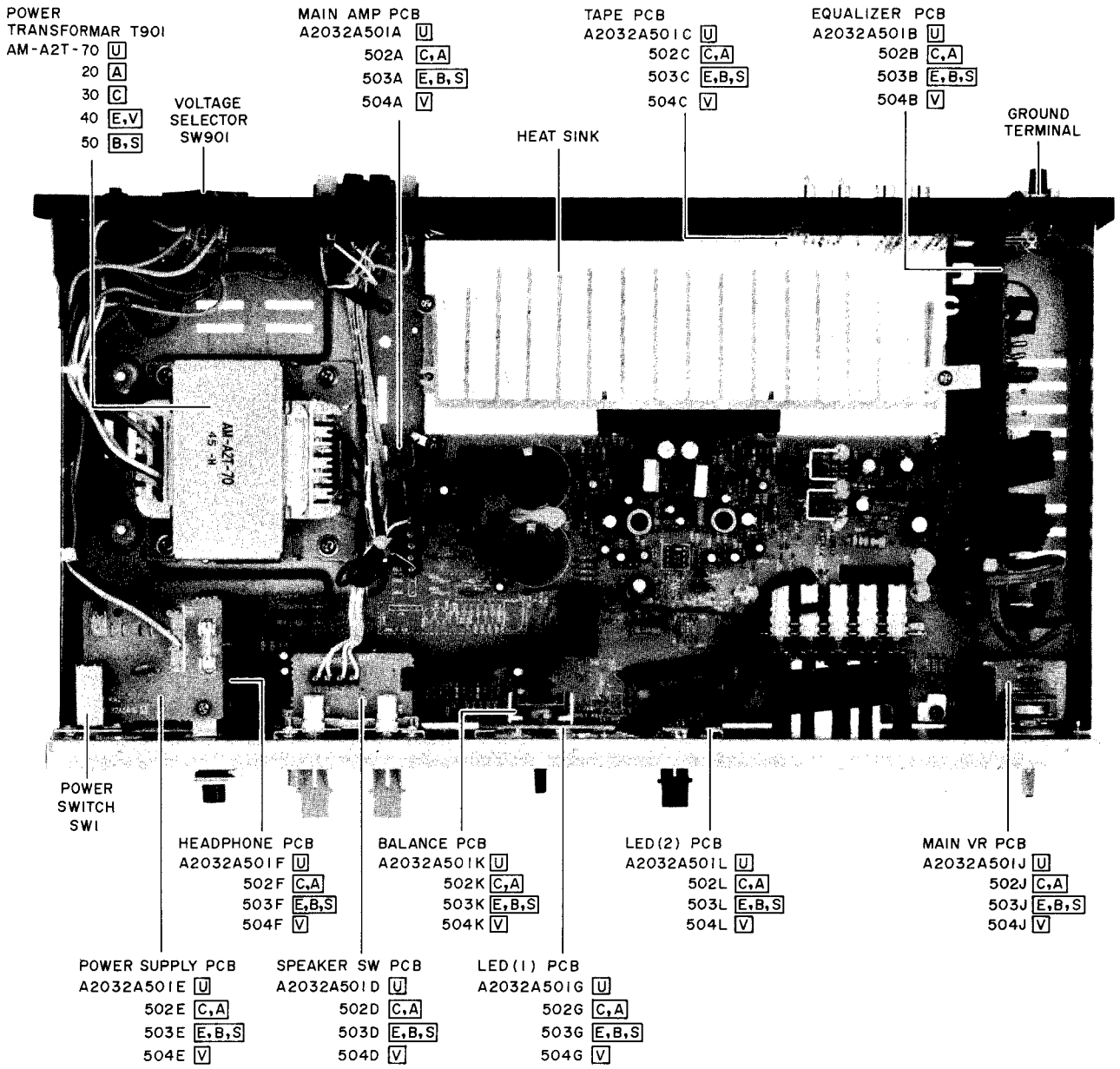

Fig. 4-1 Top View (U MODEL)

V. ADJUSTMENT

No Adjustment is Necessary for this model.

VI. PC BOARD TITLE AND IDENTIFICATIONS

PC BOARD TITLE	PC BOARD NUMBER	REMARKS
MAIN AMP PC BOARD	A2032A501A	U
	502A	C,A
	503A	E,B,S
	504A	V
EQUALIZER PC BOARD	A2032A501B	U
	502B	C,A
	503B	E,B,S
	504B	V
TAPE PC BOARD	A2032A501C	U
	502C	C,A
	503C	E,B,S
	504C	V
SPEAKER SW PC BOARD	A2032A501D	U
	502D	C,A
	503D	E,B,S
	504D	V
POWER SUPPLY PC BOARD	A2032A501E	U
	502E	C,A
	503E	E,B,S
	504E	V
HEAD PHONE PC BOARD	A2032A501F	U
	502F	C,A
	503F	E,B,S
	504F	V
LED (1) PC BOARD	A2032A501G	U
	502G	C,A
	503G	E,B,S
	504G	V
FILTER PC BOARD	A2032A504H	V
MAIN VR PC BOARD	A2032A501J	U
	502J	C,A
	503J	E,B,S
	504J	V
BALANCE PC BOARD	A2032A501K	U
	502K	C,A
	503K	E,B,S
	504K	V
LED (2) PC BOARD	A2032A501L	U
	502L	C,A
	503L	E,B,S
	504L	V
SPEAKER TERMINAL PC BOARD	A2031D507O	V

SECTION 2

PARTS LIST

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2. MAIN AMP PC BOARD 12
3. EQUALIZER PC BOARD 13
4. TAPE PC BOARD 13
5. LED (1) PC BOARD 13
6. LED (2) PC BOARD 13
7. SPEAKER SW PC BOARD 13
8. MAIN VR PC BOARD 13
9. BALANCE PC BOARD 13
10. SPEAKER TERMINAL PC BOARD 13
11. HEAD PHONE PC BOARD 13
12. POWER SUPPLY PC BOARD 13
13. FILTER PC BOARD 13
14. ASSEMBLY BLOCK 14
15. FINAL ASSEMBLY BLOCK 15
INDEX 16

Resistor and Capacitor which is not listed in this parts list, please refer to COMMON LIST FOR SERVICE PARTS.

ATTENTION

1. When placing an order for parts, be sure to list the parts no. model no., and description. There are instances in which if any of this information is omitted, parts cannot be shipped or the wrong parts will be delivered.
2. Please be careful not to make a mistake in the parts no. If the parts no. is in error, a part different from the one ordered may be delivered.
3. Because parts number and parts unit supply in the Preliminary Parts List may be partially changed, please use this parts list for all future reference.

HOW TO USE THIS PARTS LIST

1. This Parts List shows the parts that are considered necessary for repairs. Other parts, such as resistors and capacitors, are shown in the "Common List for Service Parts". Select and order such parts from the "Common List for Service Parts".
2. The Recommended Spare Parts shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not be supplied in principle.
4. How to read list

a) Mechanism Block

2. HEAD BASE BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
2-1x	BH-T2023A320A	HEAD BASE BLOCK GX-F66R
2-2	HP-H2206A010A	HEAD R/P PR4-8FU C
2-3	ZS-477876	PAN20x03STL CMT
2-4	ZS-536488	BID20x08STL CMT
2-5	ZG-402895	CS ANGLE ADJUST SPRING

SP (Service Parts) Classification

A small "x" indicates the inability to show that particular part in the Photo or Illustration.

This number corresponds with the individual parts index number in that figure

This number corresponds with the Figure Number

b) P.C Board Block

6. SYS. CON. P.C BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
6-1	BA-T2034A070A	PC SYS CON BLK GX-F44R
6-IC1	EI-324536	IC HD14049BP
6-IC2	EI-336801	IC MB8841-564M
6-IC3	EI-331661	IC SN7405N
6-IC4	EI-336725	IC M54527P
6-TR1to4	ET-200985	TR 2SC2603 F,G
6-TR5to28	ET-554657	TR 2SA733A P,Q
6-D1	ED-318292	D SILICON H 1S2473T-77 T26
6-D2to4	ED-308952	D GERMA V 1K34A-LR F07
6-D5to10	ED-318292	D SILICON H 1S2473T-77 T26
6-X1	EI-318384	OSC X'TAL NC-18C 3.579545MHZ

SP (Service Parts) Classification

This reference numbers corresponds with symbol numbers of Schematic Diagrams.

5. Both the kind of part and installation position can be determined by the Parts Number. To determine where a parts number is listed, utilize Parts Index at end of Parts List. It is necessary first of all to find the Parts Number. This can be accomplished by using the Reference Number listed at right of parts number in the Parts Index.

WARNING

⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS

AVERTISSEMENT

⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

RECOMMENDED SPARE PARTS

Because, if the parts listed below are on hand, almost any repair can be accomplished, we suggest that you stock these Recommended Spare Parts Items.

REF. NO.	PARTS NO.	DESCRIPTION
1	BT-352423	⚠TRANS POWER AM-A2T-20 (A)
2	BT-352422	⚠TRANS POWER AM-A2T-30 (C)
3	BT-352424	⚠TRANS POWER AM-A2T-40 (E,V)
4	BT-352425	⚠TRANS POWER AM-A2T-50 (B,S)
5	BT-352421	⚠TRANS POWER AM-A2T-70 (U) (U)
6	ED-349656	D LED AY5505S
7	ED-337391	D LED GL5NG6 GRN
8	ED-350748	D SILICON DBA60C-K15
9	ED-348990	D SILICON H DS446
10	ED-301911	D SILICON H DS448
11	ED-306320	D ZENER H HZ15 2
12	ED-324013	D ZENER H HZ20 2
13	EF-601964	⚠ FUSE SEMKO T 250V 1.60A (B)
14	EF-306957	⚠ FUSE TSC 125V 4.00A (C)
15	EF-326639	⚠ FUSE TSC A 250V 3.15A (U)
16	EF-346115	⚠ FUSE TSC 125V 6.30A (C,A)
17	EF-249851	FUSE SEMKO T 250V 5.00A (E,V,B,S)
18	EI-344490	IC LA6458D
19	EI-337228	IC M5218L0
20	EI-344764	IC M5218P-21
21	EI-352641	⚠ IC STK4853
22	EI-354080	IC UPC1237H
23	EQ-337159	RELAY POW G4Z-2282P 2N0 24V
24	ER-352672	⚠ R FUSE ERD2FC S10 1/4W 471J
25	ER-349423	⚠ R FUSE ERD2FC S10 1/4W 5600G
26	ER-200746	⚠ R FUSE ERD2FC 1/4W 1000G
27	ES-349070	⚠ SW SELECTOR YKS11-0002 02-4 (U) (SW901)
28	ES-352624	SW PUSH ESB-62838 2 THROW
29	ES-352632	SW PUSH ESB-62839 5-THROW
30	ES-352620	SW PUSH ESB-62922 02-2 S
31	ES-337902	SW PUSH SDLD1P 01-1
32	ET-305463	TR 2SA970 GR,BL
33	ET-322598	TR 2SB632K E,F
34	ET-307195	TR 2SC2240 GR,BL
35	ET-310148	TR 2SD612K E,F
36	EV-352622	VR ROTARY 16P10×1T W105
37	EV-352621	VR ROTARY 16P20× B104
38	EV-352645	VR ROTARY 16P20×3R C104 OPEN
39	EV-352646	VR ROTARY 16P20×3S C104 SHORT

SYMBOL FOR DESTINATION

A : AAL (U.S.A)
B : UK (England)
C : CSA (Canada)
E : CEE (Europe)
S : SAA (Australia)
U : U/T (Universal Area)
V : VDE (West Germany)

1. PC BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
		MAIN PC BOARD BLOCK
1-1A	BA-A2032A020A	PC MAIN BLK AM-A2 (U)
1-1B	BA-A2032A020B	PC MAIN BLK AM-A2 (A)
1-1C	BA-A2032A020C	PC MAIN BLK AM-A2 (E,S)
1-1D	BA-A2032A020D	PC MAIN BLK AM-A2 (V)
1-1E	BA-A2032A020E	PC MAIN BLK AM-A2 (B)
1-1F	BA-A2032A020F	PC MAIN BLK AM-A2 (C)

NOTE: MAIN PC BOARD BLOCK consists of following PC BOARDS.

MAIN AMP PC BOARD
EQUALIZER PC BOARD
TAPE PC BOARD
LED (1) PC BOARD
LED (2) PC BOARD
SPEAKER SW PC BOARD
MAIN VR PC BOARD
BALANCE PC BOARD
HEAD PHONE PC BOARD
POWER SUPPLY PC BOARD
FILTER PC BOARD

2. MAIN AMP PC BOARD

REF. NO.	PARTS NO.	DESCRIPTION
2-IC2	EI-337228	IC M5218L0
2-IC3	EI-352641	⚠ IC STK4853
2-IC4	EI-344490	IC LA6458D
2-IC5	EI-354080	IC UPC1237H
2-TR1	ET-310148	⚠ TR 2SD612K E,F
2-TR2	ET-322598	⚠ TR 2SB632K E,F
2-TR3	ET-305463	TR 2SA970 GR,BL
2-TR4	ET-307195	TR 2SC2240 GR,BL
2-D1	ED-301911	D SILICON H DS448
2-D2	ED-348990	D SILICON H DS446
2-D3	ED-301911	D SILICON H DS448
2-D4	ED-348990	⚠ D SILICON H DS446
2-D6	ED-306320	⚠ D ZENER H HZ15 2
2-D7	ED-324013	⚠ D ZENER H HZ20 2
2-D8	ED-350748	⚠ D SILICON DBA60C-K15
2-SW1	ES-352620	SW PUSH ESB-62922 02-2 S
2-SW2	ES-352632	SW PUSH ESB-62839 5-THROW
2-VR1	EV-352645	VR ROTARY 16P20×3R C104 OPEN
2-VR2	EV-352646	VR ROTARY 16P20×3S C104 SHORT
2-RL1	EQ-337159	RELAY POW G4Z-2282P 2NO 24V
2-L1	EO-337878	COIL FIX 2 201AK-007 2R2K
2-FR1	ER-349423	⚠ R FUSE ERD2FC S10 1/4W 5600G
2-FR2	ER-352672	⚠ R FUSE ERD2FC S10 1/4W 471J
2-FR3	ER-200746	⚠ R FUSE ERD2FC 1/4W 1000G
2-R30	ER-333598	⚠ R CB H S15 FS RDS 1/2W 102J
2-R39	ER-352651	⚠ R OMF H S15 FS 1W 4R7J
2-R40	ER-337754	⚠ R OMF H S15 FS 1W 100J
2-R41	ER-345466	⚠ R CT F09 PLATE 5W R22k
2-R46	ER-303690	⚠ R OMF H FS 2W 681J
2-R51	ER-306128	⚠ R CB H S15 FS RDS 1/2W 103J
2-R56	ER-352671	⚠ R OMF H S15 FS 1W 221J
2-R60	ER-328082	⚠ R CB H S10 FS RDS 1/4W 332J
2-R61	ER-323074	⚠ R CB H S10 FS RDS 1/4W 102J
2-R62	ER-302241	⚠ R CB H S10 FS RDS 1/4W 4R7J
2-R63	ER-326838	⚠ R CB H S10 FS RDS 1/4W 272J
2-R64	ER-323074	⚠ R CB H S10 FS RDS 1/4W 102J
2-R65	ER-302241	⚠ R CB H S10 FS RDS 1/4W 4R7J
2-C31	EC-343855	C EC V F05 NP SM R22M 50.0DC
2-C32	EC-325320	C EC V F05 NP AWA 2R2M 50DC
2-C33	EC-325320	C EC V F05 NP AWA 2R2M 50DC
2-C52	EC-326583	C MMY V CUT CF921 473K 400DC
2-F3A	EF-346115	⚠ FUSE TSC 125V 6.30A (C,A)
2-F3B	EF-249851	⚠ FUSE SEMKO T 250V, 5.00A (E,V,B,S)
2-F4A	EF-346115	⚠ FUSE TSC 125V 6.30A (C,A)
2-F4B	EF-249851	⚠ FUSE SEMKO T 250V 5.00A (E,V,B,S)

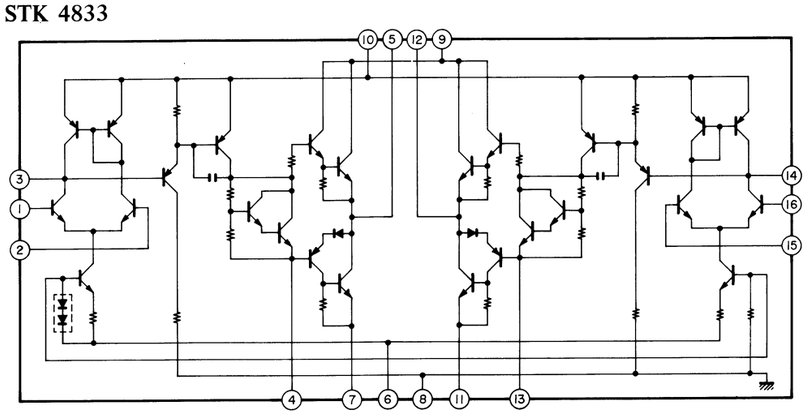
AKAI

MODEL AM-A2

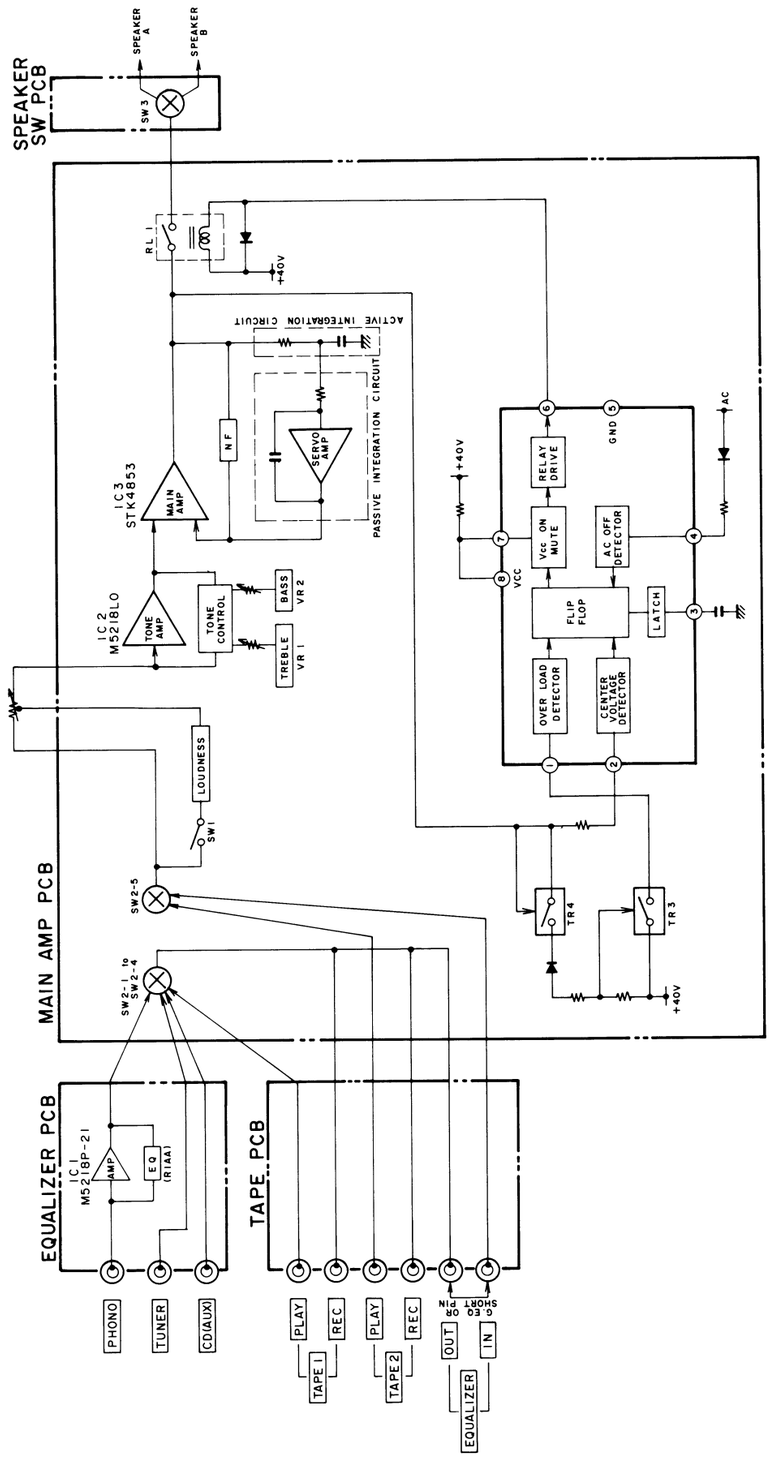
SCHEMATIC DIAGRAM AND PC BOARD

1. SCHEMATIC DIAGRAM OF ICs 1
2. BLOCK DIAGRAM 1
3. SCHEMATIC DIAGRAM 2
4. FILTER PC BOARD, MAIN-AMP PC BOARD, POWER SUPPLY PC BOARD, SPEAKER TERMINAL PC BOARD 3
5. BALANCE PC BOARD, EQUALIZER PC BOARD, HEADPHONE PC BOARD, LED (1) PC BOARD, LED (2) PC BOARD, MAIN VR PC BOARD, SPEAKER SW PC BOARD, TAPE PC BOARD 4

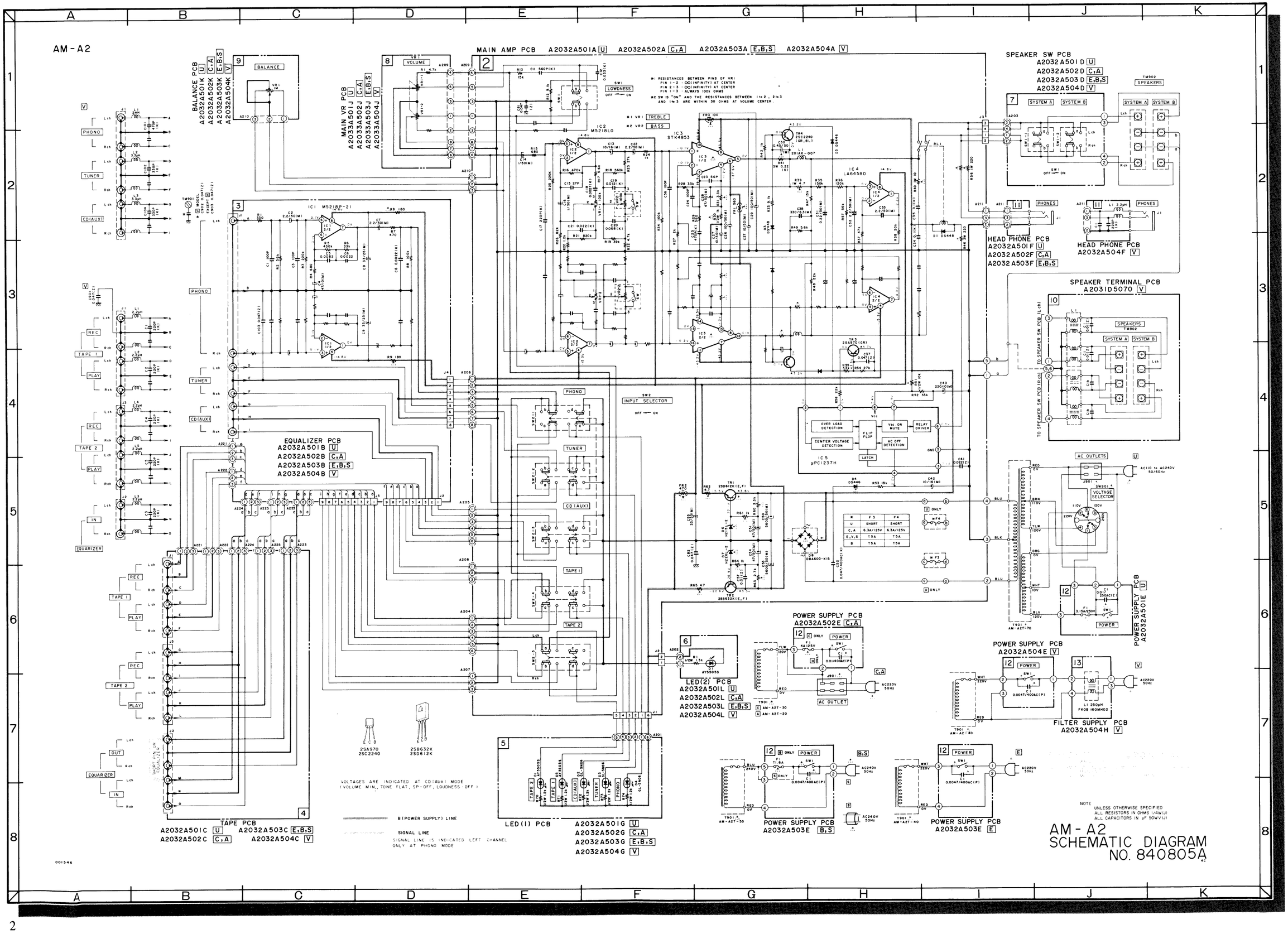
STK 4833



AM-A2
BLOCK DIAGRAM
NO. 8408804A (A3)



AM-A2


MAIN AMP PCB A2032A501A U A2032A502A C,A A2032A503A E,B,S A2032A504A V
BALANCE PCB
A2032A501K U
A2032A502K C,A
A2032A503K E,B,S
A2032A504K V
MAIN VR PCB
A2033A501J U
A2033A502J C,A
A2033A503J E,B,S
A2033A504J V
SPEAKER SW PCB
A2032A501D U
A2032A502D C,A
A2032A503D E,B,S
A2032A504D V
HEAD PHONE PCB
A2032A501F U
A2032A502F C,A
A2032A503F E,B,S
HEAD PHONE PCB
A2032A504F V
SPEAKER TERMINAL PCB
A2031D5070 V
EQUALIZER PCB
A2032A501B U
A2032A502B C,A
A2032A503B E,B,S
A2032A504B V
TAPE PCB
A2032A501C U
A2032A502C C,A
A2032A503C E,B,S
A2032A504C V
LED(1) PCB
A2032A501G U
A2032A502G C,A
A2032A503G E,B,S
A2032A504G V
LED(2) PCB
A2032A501L U
A2032A502L C,A
A2032A503L E,B,S
A2032A504L V
POWER SUPPLY PCB
A2032A501E U
POWER SUPPLY PCB
A2032A502E C,A
POWER SUPPLY PCB
A2032A504E V
POWER SUPPLY PCB
A2032A503E B,S
POWER SUPPLY PCB
A2032A503E E
FILTER SUPPLY PCB
A2032A504H V
IC1 M5218P-21
IC2 M5218L0
IC3 STK4853
IC4 LA6458D
IC5 μPC1237H
VOLUME
BALANCE
LOWDNESS
INPUT SELECTOR
PHONO
TUNER
CD(AUX)
TAPE 1
TAPE 2
REC
PLAY
SPEAKERS TM902
SYSTEM A
SYSTEM B
PHONES
AC OUTLETS
VOLTAGE SELECTOR
OVER LOAD DETECTION
CENTER VOLTAGE DETECTION
FLIP FLOP
LATCH
Vcc ON MUTE
RELAY DRIVER
AC OFF DETECTION
2SA970 2SC2240
2SB632K 2SD612K
VOLTAGES ARE INDICATED AT CD(AUX) MODE (VOLUME MIN., TONE FLAT, SP-OFF, LOUDNESS-OFF)
B (POWER SUPPLY) LINE
SIGNAL LINE
SIGNAL LINE IS INDICATED LEFT CHANNEL ONLY AT PHONO MODE
001546
NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W(J)
ALL CAPACITORS IN μF 50WV(J)
AM-A2
SCHEMATIC DIAGRAM
NO. 840805A

3. EQUALIZER PC BOARD

REF. NO.	PARTS NO.	DESCRIPTION
3-IC1	EI-344764	IC M5218P-21
3-L1	EO-338420	COIL FIX 2 FL12R202E 202K (V)
3-L2,3	EO-345907	COIL FIX 1 LAL03KH 3R3K (V)
3-R9	ER-200939	R CB H S10 FS RDS 1/4W 181J
3-J1	EJ-344370	PIN J YKC21-0081 P 6P

4. TAPE PC BOARD

REF. NO.	PARTS NO.	DESCRIPTION
4-L1 to 5	EO-336934	COIL FIX 1 LAL03KH 2R2M (V)
4-J1 to 3	EJ-343365	PIN J YMC21-0063 P 4P

5. LED (1) PC BOARD

REF. NO.	PARTS NO.	DESCRIPTION
5-D1	ED-349656	D LED AY5505S
5-D2 to 4	ED-337391	D LED GL5NG6 GRN
5-D5	ED-349656	D LED AY5505S
5-R70 to 74	ER-617940	R CB H RD 1/2W 122J

6. LED (2) PC BOARD

REF. NO.	PARTS NO.	DESCRIPTION
6-D1	ED-349656	D LED AY5505S
6-R1	ER-565334	R CB H RD 1/2W 132J

7. SPEAKER SW PC BOARD

REF. NO.	PARTS NO.	DESCRIPTION
7-SW1	ES-352624	SW PUSH ESB-62838 2 THROW

8. MAIN VR PC BOARD

REF. NO.	PARTS NO.	DESCRIPTION
8-VR1	EV-352621	VR ROTARY 16P20X B104

9. BALANCE PC BOARD

REF. NO.	PARTS NO.	DESCRIPTION
9-VR1	EV-352622	VR ROTARY 16P10×1T W105

10. SPEAKER TERMINAL PC BOARD

REF. NO.	PARTS NO.	DESCRIPTION
10-L1	EO-342936	COIL BALUN (V)
10-TM902	EJ-349401	TERMINAL LEVER YKD21-0027 8 P (V)

11. HEAD PHONE PC BOARD

REF. NO.	PARTS NO.	DESCRIPTION
11-L1	EO-336934	COIL FIX 1 LAL03KH 2R2M (V)
11-J1A	EJ-343380	PHONE J 3P HLJ0541-040 6.3 (EXCEPT BL)
11-J1B	EJ-355012	PHONE J 3P HLJ0541-010 6.3 (BL)

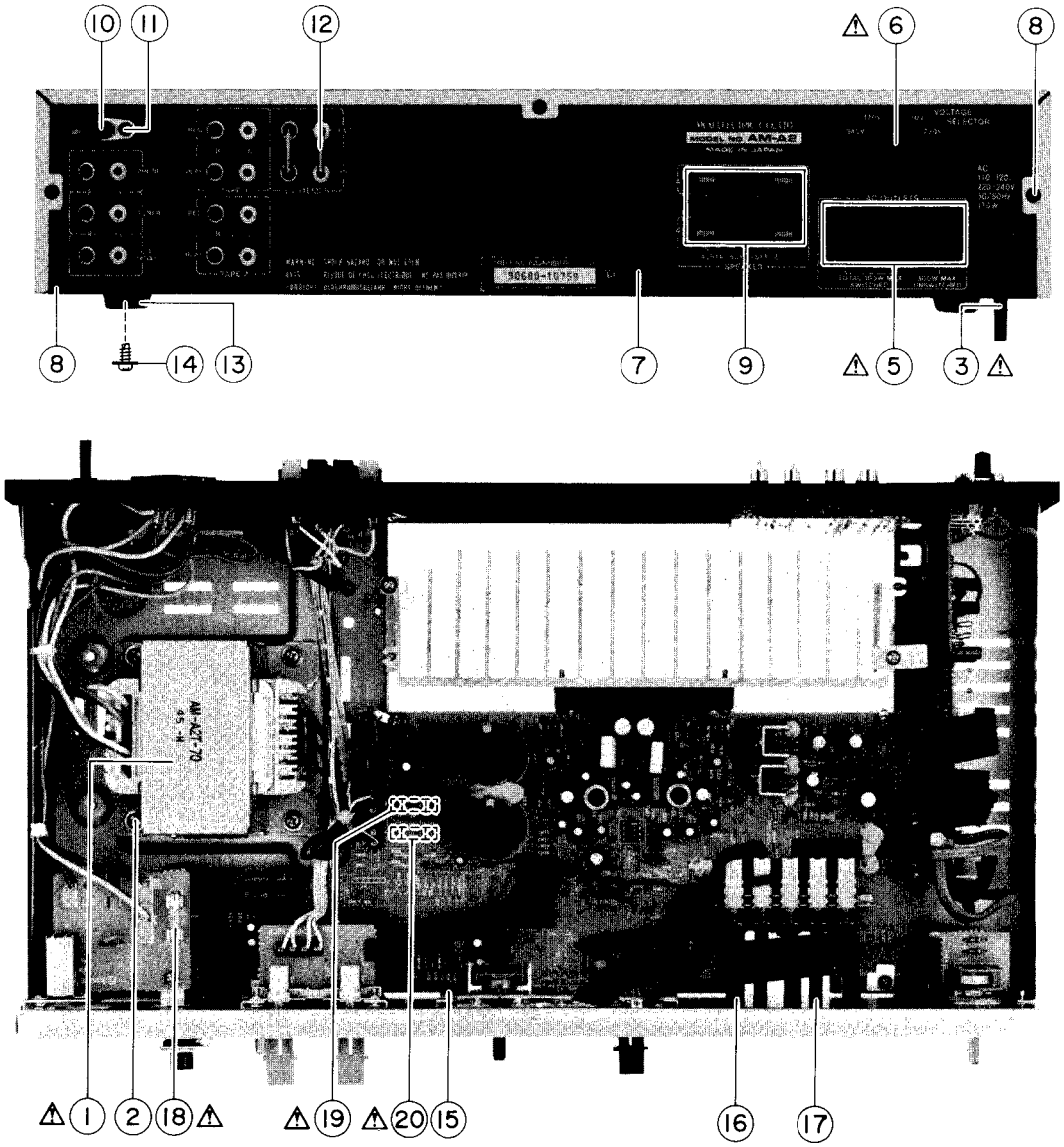
12. POWER SUPPLY PC BOARD

REF. NO.	PARTS NO.	DESCRIPTION
12-SW1	ES-337902	⚠ SW PUSH SDLD1P 01-1
12-C1A	EC-320548	⚠ C CE V F 103Z 250AC (U)
12-C1B	EC-338411	⚠ C CE V FZ 103P 400AC (C,A)
12-C1C	EC-338496	⚠ C CE V FZ 472P 400AC (E,V,B,S)
12-F1A	EF-326639	⚠ FUSE TSC A 250V 3.15A (U)
12-F1B	EF-601964	⚠ FUSE SEMKO T 250V 1.60A (B)
12-F1C	EF-306957	⚠ FUSE TSC 125V 4.00A (C)

13. FILTER PC BOARD

REF. NO.	PARTS NO.	DESCRIPTION
13-FL1	EO-338409	COIL LF FKOB160MH02 250UH (V)

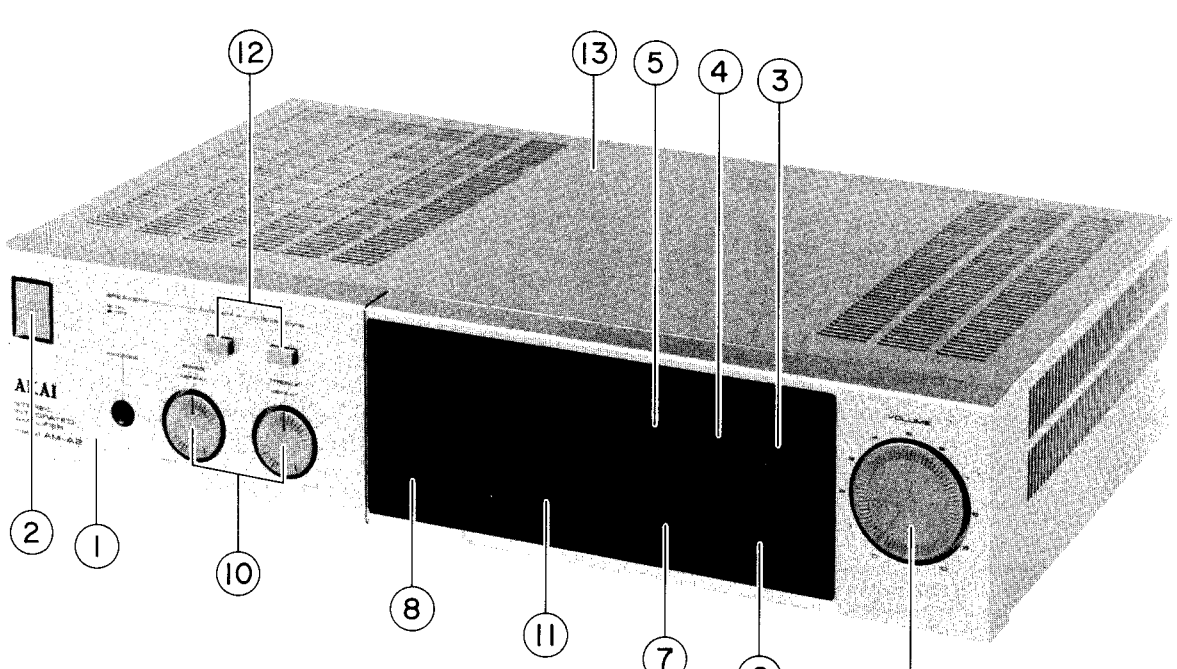
ASSEMBLY BLOCK



14. ASSEMBLY BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
14-1A	BT-352421	⚠TRANS POWER AM-A2T-70 (U)
14-1B	BT-352422	⚠TRANS POWER AM-A2T-30 (C)
14-1C	BT-352423	⚠TRANS POWER AM-A2T-20 (A)
14-1D	BT-352424	⚠TRANS POWER AM-A2T-40 (E,V)
14-1E	BT-352425	⚠TRANS POWER AM-A2T-50 (B,S)
14-2	ZS-346742	ST BID40x08STL CMT CUP
14-3A	EW-354515	⚠AC CORD 2 CORES KP-700A, VFF-CB U/T (U)
14-3B	EW-349427	⚠AC CORD 2 CORES KP-8W, SPT-2 UC (C)
14-3C	EW-349428	⚠AC CORD 2 CORES KP-8W, SPT-1 UC (A)
14-3D	EW-354625	⚠AC CORD 2 CORES KP-419C, LTCE-2F E (E)
14-3E	EW-354513	⚠AC CORD 2 CORES KP-419C, LTCE-2F EV (V)
14-3F	EW-354512	⚠AC CORD 2 CORES LTBS-2F-CB B (B)
14-3G	EW-354514	⚠AC CORD 2 CORES KP-560, LTSA2F-CB S (S)
14-4x	EZ-631945	STRAIN RELIEF SR-4N-4 (C,A)
14-5A	EJ-337405	⚠SOCKET OUTLET S2T733T164 JUC 3x2P (U) (J901)
14-5B	EJ-352642	⚠SOCKET OUTLET S2T733T114T (C,A) (J901)
14-6	ES-349070	⚠SW SELECTOR YKS11-0002 02-4 (U) (SW901)
14-7A	SP-349930E	PANEL REAR AM-A2 (U)
14-7B	SP-349930F	PANEL REAR AM-A2 (C,A)
14-7C	SP-349930G	PANEL REAR AM-A2 (E,V)
14-7D	SP-349930H	PANEL REAR AM-A2 (B,S)
14-8	ZS-308846	T2BR30x08STL BZN PROJECTION
14-9A	EJ-351485	TERMINAL PUSH YKD21-0148A S 8P (EXCEPT V)
14-9B	EJ-349401	TERMINAL LEVER YKD21-0027 8P (V)
14-10	EJ-329610	TERMINAL W/SCREW UB-0067 L 1P
14-11	ZS-308846	T2BR30x08STL BZN PROJECTION

FINAL ASSEMBLY BLOCK



REF. NO.	PARTS NO.	DESCRIPTION
14-12	EJ-348218	PLUG SHORT PIN P2138
14-13	SA-202118	FOOT
14-14	ZS-498273	T2BR30×08STL CMT PW080
14-15	ZW-698308	RV NYL30×055 BL
14-16	TA-349937	JOINT (B)
14-17	TA-349938	JOINT (C)
14-18A	EF-326639	⚠ FUSE TSC A 250V 3.15A (U) (F1)
14-18B	EF-601964	⚠ FUSE SEMKO T 250V 1.60A (B) (F1)
14-18C	EF-306957	⚠ FUSE TSC 125V 4.00A (C) (F1)
14-19A	EF-366115	⚠ FUSE TSC 125V 6.30A (C,A) (F3)
14-19B	EF-249851	⚠ FUSE SEMKO T 250V 5.00A (E,V,B,S) (F3)
14-20A	EF-346115	⚠ FUSE TSC 125V 6.30A (C,A) (F4)
14-20B	EF-249851	⚠ FUSE SEMKO T 250V 5.00A (E,V,B,S) (F4)
14-21x	ZW-305013	RV P0P32 (A)

15. FINAL ASSEMBLY BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
	PANEL FRONT BLOCK	
15-1	BD-A2032A030A	PANEL FRONT BLK AM-A2
15-1P	BD-A2032A030B	PANEL FRONT BLK AM-A2-P
15-1B	BD-A2032A030C	PANEL FRONT BLK AM-A2-B
15-2	SK-343017C	KNOB POWER (2)
15-2P	SK-343017D	KNOB POWER (2)-P
15-2B	SK-343017F	KNOB POWER-B
15-3	SK-349943A	KNOB (C-1) (EXCETP BL)
15-3B	SK-349943D	KNOB (C-1)-B (BL)
15-4	SK-349943B	KNOB (C-2) (EXCEPT BL)
15-4B	SK-349943E	KNOB (C-2)-B (BL)
15-5	SK-349943C	KNOB (C-3) (EXCEPT BL)
15-5B	SK-349943F	KNOB (C-3)-B (BL)
15-6	SK-349941A	KNOB (D-1) (EXCEPT BL)
15-6B	SK-349941E	KNOB (D-1)-B (BL)
15-7	SK-349941B	KNOB (D-2) (EXCEPT BL)
15-7B	SK-349941F	KNOB (D-2)-B (BL)
	FINAL ASSEMBLY BLOCK	
15-8	SK-332591A	KNOB VOLUME (A) (EXCEPT BL)
15-8B	SK-332591E	KNOB VOLUME (A-5) (BL)
15-9	SK-345375G	KNOB VOLUME (E)
15-9P	SK-345375D	KNOB VOLUME (B)-P
15-9B	SK-345375K	KNOB VOLUME (H)-B
15-10	SK-349939A	KNOB (A)
15-10P	SK-349939B	KNOB (A)-P
15-10B	SK-349939C	KNOB (A)-B
15-11	SK-349940A	KNOB (B-1)
15-12	SK-349940B	KNOB (B-2)
15-12P	SK-349940C	KNOB (B-3)
15-12B	SK-349940A	KNOB (B-1)
15-13	SP-349925A	COVER UPPER
15-13P	SP-349925B	COVER UPPER-P
15-13B	SP-349925C	COVER UPPER-B

SYMBOL FOR COLOR VARIATION

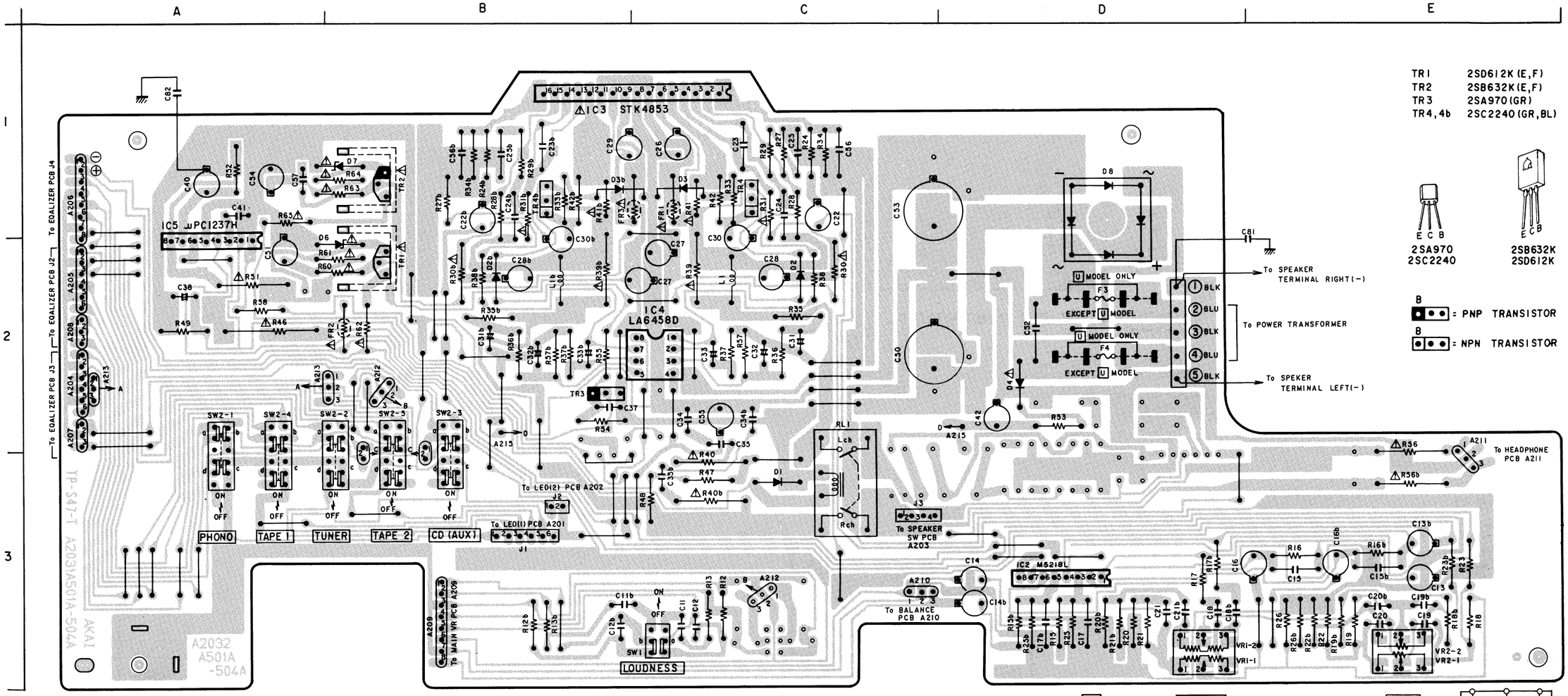
NON : STANDARD COLOR

P : PEARL SHADOW

B or BL : BLACK

INDEX

PARTS NO.	REF. NO.	PARTS NO.	REF. NO.	PARTS NO.	REF. NO.	PARTS NO.	REF. NO.	PARTS NO.	REF. NO.
BA-A2032A020A	1-1A	ER-200939	3-R9	ZS-346742	14-2				
BA-A2032A020B	1-1B	ER-302241	2-R62	ZS-498273	14-14				
BA-A2032A020C	1-1C	ER-302241	2-R65	ZW-305013	14-21x				
BA-A2032A020D	1-1D	ER-303690	2-R46	ZW-698308	14-15				
BA-A2032A020E	1-1E	ER-306128	2-R51						
BA-A2032A020F	1-1F	ER-323074	2-R61						
BD-A2032A030A	15-1	ER-323074	2-R64						
BD-A2032A030B	15-1P	ER-326838	2-R63						
BD-A2032A030C	15-1B	ER-328082	2-R60						
BT-352421	14-1A	ER-333598	2-R30						
BT-352422	14-1B	ER-337754	2-R40						
BT-352423	14-1C	ER-345466	2-R41						
BT-352424	14-1D	ER-349423	2-FR1						
BT-352425	14-1E	ER-352651	2-R39						
EC-320548	12-C1A	ER-352671	2-R56						
EC-325320	2-C32	ER-352672	2-FR2						
EC-325320	2-C33	ER-565334	6-R1						
EC-326583	2-C52	ER-617940	5-R70						
EC-338411	12-C1B	ER-617940	5-R71						
EC-338496	12-C1C	ER-617940	5-R72						
EC-343855	2-C31	ER-617940	5-R73						
ED-301911	2-D3	ER-617940	5-R74						
ED-301911	2-D1	ES-337902	12-SW1						
ED-306320	2-D6	ES-349070	14-6						
ED-324013	2-D7	ES-352620	2-SW1						
ED-337391	5-D2	ES-352624	7-SW1						
ED-337391	5-D3	ES-352632	2-SW2						
ED-337391	5-D4	ET-305463	2-TR3						
ED-348990	2-D2	ET-307195	2-TR4						
ED-348990	2-D4	ET-310148	2-TR1						
ED-349656	5-D1	ET-322598	2-TR2						
ED-349656	5-D5	EV-352621	8-VR1						
ED-349656	6-D1	EV-352622	9-VR1						
ED-350748	2-D8	EV-352645	2-VR1						
EF-249851	2-F3B	EV-352646	2-VR2						
EF-249851	2-F4B	EW-349427	14-3B						
EF-249851	14-19B	EW-349428	14-3C						
EF-249851	14-20B	EW-354512	14-3F						
EF-306957	12-F1C	EW-354513	14-3E						
EF-306957	14-18C	EW-354514	14-3G						
EF-326639	12-F1A	EW-354555	14-3A						
EF-326639	14-18A	EW-354625	14-3D						
EF-346115	2-F3A	EZ-631945	14-4x						
EF-346115	2-F4A	SA-202118	14-13						
EF-346115	14-19A	SK-332591A	15-8						
EF-346115	14-20A	SK-332591E	15-8B						
EF-601964	12-F1B	SK-343017C	15-2						
EF-601964	14-18B	SK-343017D	15-2P						
EI-337228	2-IC2	SK-343017F	15-2B						
EI-344490	1-IC4	SK-345375D	15-9P						
EI-344764	3-IC1	SK-345375G	15-9						
EI-352641	2-IC3	SK-345375K	15-9B						
EI-354080	2-IC5	SK-349939A	15-10						
EJ-329610	14-10	SK-349939B	15-10P						
EJ-337405	14-5A	SK-349939C	15-10B						
EJ-343365	4-J2	SK-349940A	15-11						
EJ-343365	4-J3	SK-349940A	15-12B						
EJ-343365	4-J1	SK-349940B	15-12						
EJ-343380	11-J1A	SK-349940C	15-12P						
EJ-344370	3-J1	SK-349941A	15-6						
EJ-348218	14-12	SK-349941B	15-7						
EJ-349401	10-TM902	SK-349941E	15-6B						
EJ-349401	14-9B	SK-349941F	15-7B						
EJ-351485	14-9A	SK-349943A	15-3						
EJ-352642	14-5B	SK-349943B	15-4						
EJ-355012	11-J1B	SK-349943C	15-5						
EO-336934	4-L1	SK-349943D	15-3B						
EO-336934	4-L2	SK-349943E	15-4B						
EO-336934	4-L3	SK-349943F	15-5B						
EO-336934	4-L4	SP-349925A	15-13						
EO-336934	4-L5	SP-349925B	15-13P						
EO-336934	11-L1	SP-349925C	15-13B						
EO-337878	2-L1	SP-349930E	14-7A						
EO-338409	13-FL1	SP-349930F	14-7B						
EO-338420	3-L1	SP-349930G	14-7C						
EO-342936	10-L1	SP-349930H	14-7D						
EO-345907	3-L2	TA-349937	14-16						
EO-345907	3-L3	TA-349938	14-17						
EQ-337159	2-RL1	ZS-308846	14-8						
ER-200746	2-FR3	ZS-308846	14-11						



TR1 2SD612K(E,F)
TR2 2SB632K(E,F)
TR3 2SA970(GR)
TR4,4b 2SC2240(GR,BL)

E C B
2SA970
2SC2240

E C B
2SB632K
2SD612K

B = PNP TRANSISTOR
B = NPN TRANSISTOR

MAIN-AMP PCB A2032A501A U

502A C,A
503A E,B,S
504A V

LOCATION OF COMPONENTS

ICs	TRs	TERMINALS
IC2----D3	TR1----B2	J1,2-------B3
IC3----B1,C1	TR2----B1	J3-------C3
IC4----C2	TR3----B2	A204,A205---A2
IC5----A1,A2	TR4----C1	A206-----A1
	TR4b---B1	A207,A208---A2
		A209-----B3
		A210-----C3
		A211-----E3
		① to ⑤----D2

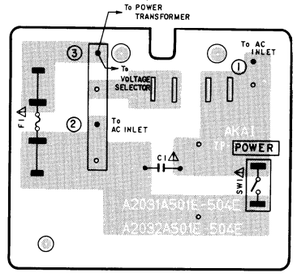
WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

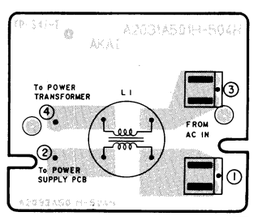
TREBLE BASS

※1 Resistance between pins of VR1
pin1-2: ∞ (infinity) at center
pin2-3: ∞ (infinity) at center
pin1-3: always 100k ohms

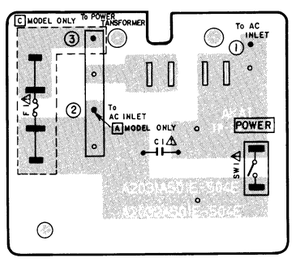
※2 SW is "ON" and the resistances beetween 1 to 2, 2 to 3 & 1 to 3 are within 30 ohms at volume center.



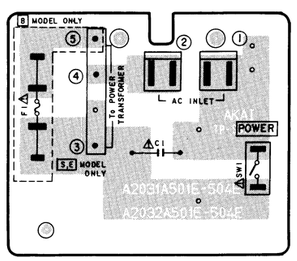
POWER SUPPLY PCB A2032A501E U



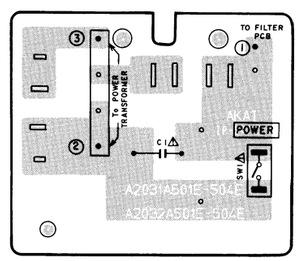
FILTER PCB A2032A504H V



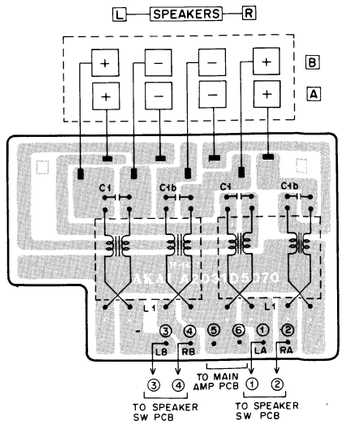
POWER SUPPLY PCB A2032A502E C,A



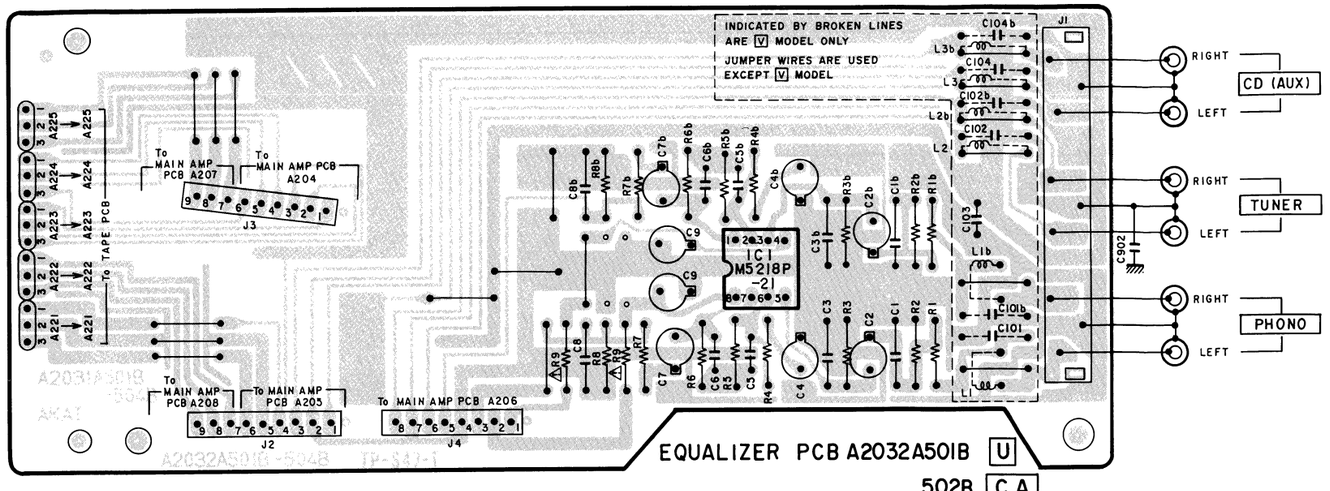
POWER SUPPLY PCB A2032A503E E,B,S



POWER SUPPLY PCB A2032A504E V



SPEAKER TERMINAL PCB
A2031D5070



EQUALIZER PCB A2032A501B [U]

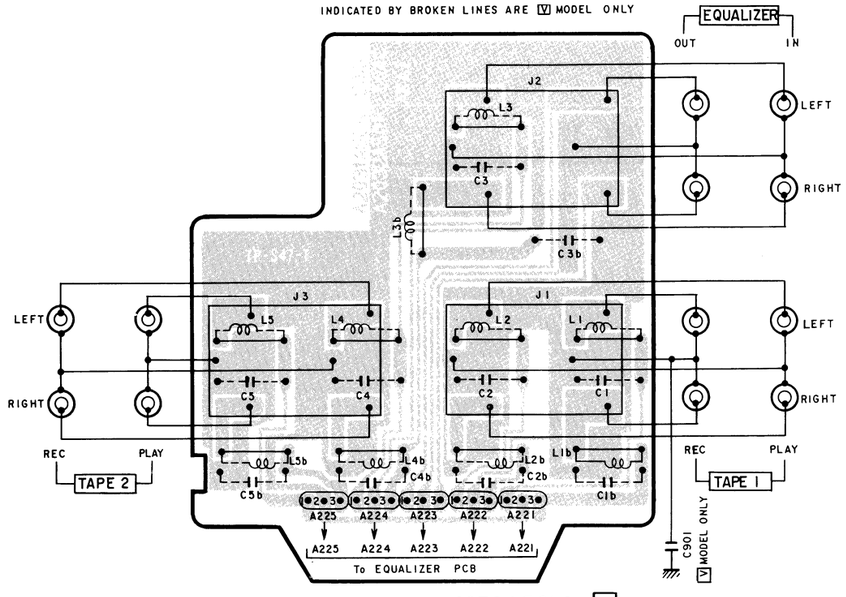
502B [C,A]

503B [E,B,S]

504B [V]

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

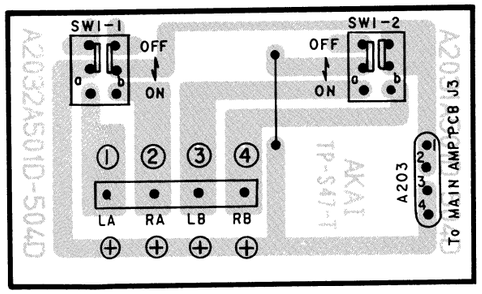


TAPE PCB A2032A501C [U]

502C [C,A]

503C [E,V,S]

504C [V]

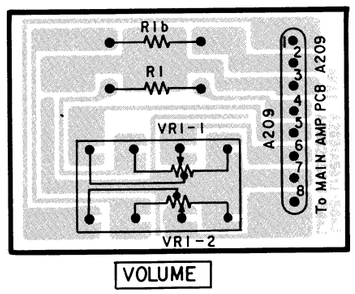


SPEAKER SW PCB A2032A501D [U]

502D [C,A]

503D [E,B,S]

504D [V]



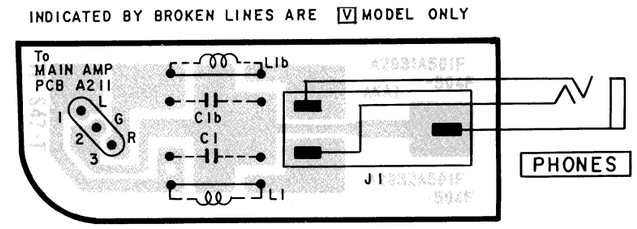
VOLUME

MAIN VR PCB A2032A501J [U]

502J [C,A]

503J [E,B,S]

504J [V]

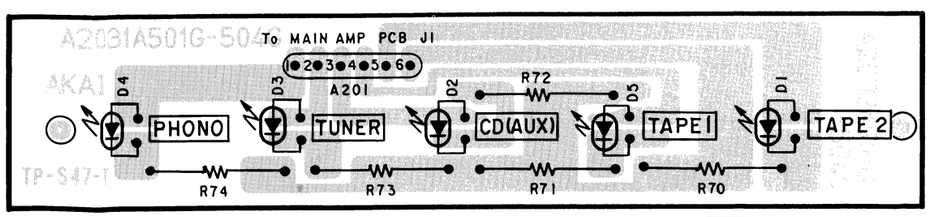


HEADPHONE PCB A2032A501F [U]

502F [C,A]

503F [E,B,S]

504F [V]

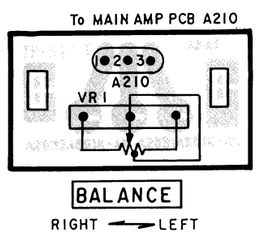


LED(1) PCB A2032A501G [U]

502G [C,A]

503G [E,B,S]

504D [V]

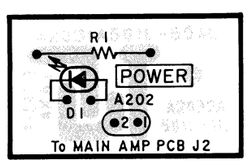


BALANCE PCB A2032A501K [U]

502K [C,A]

503K [E,B,S]

504K [V]



LED(2) PCB A2032A501L [U]

502L [C,A]

503L [E,B,S]

504L [V]